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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,634	01/03/2005	Paul David Howlett	257.036	4891

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EXAMINER

STEPHENSON, DANIEL P

ART UNIT PAPER NUMBER

3672

DATE MAILED: 10/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/501,634

Applicant(s)

HOWLETT, PAUL DAVID

Examiner

Daniel P. Stephenson

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-14, 16, 18 and 19 is/are rejected.
- 7) ☒ Claim(s) 7, 15 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6/22/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The references cited in the Search Report by the EPO on 22 May 2003 have been considered, but will not be listed on any patent resulting from this application because they were not provided on a separate list in compliance with 37 CFR 1.98(a)(1). In order to have the references printed on such resulting patent, a separate listing, preferably on a PTO/SB/08A and 08B form, must be filed within the set period for reply to this Office action.

### ***Specification***

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino

Art Unit: 3672

acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

2. The disclosure is objected to because of the following informalities: it lacks title headings.

Appropriate correction is required.

3. The disclosure is objected to because of the following informalities: on line 14 of page 11, the term "64" should be --43--.

Appropriate correction is required.

#### ***Claim Objections***

4. Claims 5, 6, 8 and 14 are objected to because of the following informalities: the term "the body" lacks antecedent basis. Appropriate correction is required.
  5. Claim 7 is objected to because of the following informalities: the term "the plurality of longitudinally planar sections" lacks antecedent basis. Appropriate correction is required.
  6. Claim 16 is objected to because of the following informalities: on line 4 of the claim the terms "locating one or more further" should be --locating one or more tools further--.
- Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3672

8. Claims 1-6, 8, 16, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerstenkorn 2,323,027 in view of Carothers 3,809,161. Gerstenkorn (figures 1 and 2) discloses a downhole tool for location on a work string. The tool has an assembly (13) operable from the work string (2) and disengageable from the work string at a selected location (24) in the well bore. The tool also includes retrieval means (8) to pick up and engage the assembly on retrieval of the work string from the well bore. The tool comprises a substantially tubular body (2) upon which is located the assembly. The assembly is a milling sleeve positioned on an outer surface of the tool. The assembly includes a shoulder (9) on an inner surface thereof, the shoulder providing a ledge upon which a portion of the body engages when the tool is retrieved from the well bore. The assembly is detachably coupled to the body, since it can be detached.

Gerstenkorn shows all the limitations of the claimed invention, except it does not disclose that there is a hex-drive system to drive the assembly, where the body includes a portion of an outer surface having a plurality of longitudinally extending planar sections arranged around a circumference of the body, and the assembly includes an inner surface, a portion of which has a plurality of longitudinally extending sections matching those of the body, such that when the body is rotated by virtue of the work string being rotated, the assembly is rotated also.

Carothers (figures 1A and 2) discloses using a hex drive (25) to power a surrounding assembly from a tubular body. The tubular body has a portion of an outer surface having a plurality of longitudinally extending planar sections arranged around a circumference of the body, and the assembly includes an inner surface, a portion of which has a plurality of longitudinally extending sections matching those of the body, such that when the body is rotated by virtue of the work string being rotated, the assembly is rotated also.

Art Unit: 3672

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the hex drive of Carothers with the apparatus of Gerstenkorn. This would be done because it is common knowledge within the art to drive a milling device with a hexagonal tubular.

9. Claims 1-3, 5, 6, 8-10, 14, 16, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds 6,371,207 in view of Carothers 3,809,161. Reynolds (figures 8-11) discloses a downhole tool for location on a work string. The tool has an assembly (360,362) operable from the work string (332) and disengageable from the work string at a selected location (334) in the well bore. The tool also includes retrieval means (370) to pick up and engage the assembly on retrieval of the work string from the well bore. The tool comprises a substantially tubular body (2) upon which is located the assembly. The assembly is a sleeve (364) positioned on an outer surface of the tool. The assembly includes a shoulder on an inner surface thereof, the shoulder providing a ledge upon which a portion of the body engages when the tool is retrieved from the well bore. The assembly is detachably coupled to the body by shear pins (363,365). The shear pins shear when the assembly contacts a formation with its outer shoulder. It is disclosed that a "no-go" assembly could be used to prevent premature detachment of the assembly (col. 3, lines 63-67).

Reynolds shows all the limitations of the claimed invention, except it does not disclose that there is a hex-drive system to drive the assembly, where the body includes a portion of an outer surface having a plurality of longitudinally extending planar sections arranged around a circumference of the body, and the assembly includes an inner surface, a portion of which has a

Art Unit: 3672

plurality of longitudinally extending sections matching those of the body, such that when the body is rotated by virtue of the work string being rotated, the assembly is rotated also.

Carothers discloses using a hex drive (25) to power a surrounding assembly from a tubular body. The tubular body has a portion of an outer surface having a plurality of longitudinally extending planar sections arranged around a circumference of the body, and the assembly includes an inner surface, a portion of which has a plurality of longitudinally extending sections matching those of the body, such that when the body is rotated by virtue of the work string being rotated, the assembly is rotated also.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the hex drive of Carothers with the apparatus of Reynolds. This would be done because it is common knowledge within the art to drive cleaning devices with a hexagonal tubular.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds 6,371,207 in view of Carothers 3,809,161 as applied to claim 9 in further view of the Japanese document 01055429 to Niimi (hereafter JPO '429). Reynolds in view of Carothers shows all the limitations of the claimed invention, except it does not disclose that there is a constricted portion of the shear pin located at the point between the assembly and the body. JPO (abstract, figure 4) discloses a constricted shear pin (7). The constriction (13) is located at the point of intended shear. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the shear pin of JPO '429 with the apparatus of Reynolds in view of Carothers. This would be done to control where the shear would occur in the shear pins.

Art Unit: 3672

11. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds 6,371,207 in view of Carothers 3,809,161 as applied to claim 9 in further view of Brisco 5,071,288 and Crowe 3,108,594. Reynolds in view of Carothers shows all the limitations of the claimed invention, except it does not disclose that there is a means of retaining the sheared portions of the pin. Nor do they disclose that there is a pocket on the assembly for retaining the portions. Brisco discloses using a plug (133) with a shear pin, thus forming a pocket that the portion of the pin is retained in when it is sheared. Crowe discloses using a shear pin (29) that is screwed into a pocket on the body that it connects, and that rests on a flange after it is screwed in. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the shear screw and plug of Brisco and Crowe with the apparatus of Reynolds in view of Carothers. This would be done because it is common knowledge in the art of shear pins/screws to use screws and plugs when retention is desired.

#### ***Allowable Subject Matter***

12. Claims 7, 15 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Case, Moore and Ferguson et al. all show similar features to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel P. Stephenson whose telephone number is (571) 272-7035. The examiner can normally be reached on 8:30 - 5:00 M-F.



Art Unit: 3672

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



David Bagnell  
Supervisory Patent Examiner  
Art Unit 3672

DPS 